

LIBRARY  
NEW YORK  
PROCEEDINGS OF THE  
OF THE  
AMERICAN  
FORESTRY CONGRESS,

AT ITS SESSIONS HELD AT

CINCINNATI, OHIO, IN APRIL, 1882,

AND AT

MONTREAL, CANADA, IN AUGUST, 1882.

---

WITH A NOTICE OF THE ORGANIZATION OF THE AMERICAN  
FORESTRY ASSOCIATION UNITED WITH IT  
AT THE MONTREAL SESSION.

---

PUBLISHED UNDER THE DIRECTION OF THE EXECUTIVE COMMITTEE.

---

WASHINGTON:  
PRINTED FOR THE SOCIETY,  
1883.

LIBRARY  
STATE UNIVERSITY  
COLLEGE OF FORESTRY  
SYRACUSE

MOON MEMORIAL LIBRARY  
State University College of Forestry  
Syracuse, New York, 13210

SPECIAL  
35  
112  
115  
1882

PROCEEDINGS  
OF THE  
AMERICAN FORESTRY CONGRESS,  
FOR THE YEAR 1882.

PRELIMINARY PROCEEDINGS AT CINCINNATI, OHIO.

Among the guests invited by the Government of the United States, to participate in the Centennial Anniversary, of the Surrender of Lord Cornwallis, at Yorktown, Va., in the autumn of 1881, were six officers of the Prussian Army, bearing the name of Von Steuben, representing the family of Baron Steuben, of the American Revolution; and a seventh, Richard Baron Von Steuben, bearing the rank of "Oberforster," in the Prussian Forest Service.

After the celebration at Yorktown, the Von Steubens visited many places in the United States, and among others, Cincinnati, where a public reception was given—most of the prominent citizens of that place participating therein. In a conversation between the Forest Official and Judge Warren Higley and others, the waste and neglect of our American forests was particularly mentioned as a subject deserving of public notice.

This suggestion was followed up by further discussion, and in January, Col. William L. DeBeck and others, began to agitate the question of arousing the public attention to this subject, by holding a convention in that city. A meeting was soon after held at the Gibson House, under a call through the papers, at which a number of prominent citizens took a prominent part. This resulted in the appointment of the following officers for preliminary proceedings:

President: Hon. John Simpinkson.

Vice-Presidents: Hon. Wm. S. Groesbeck, Judge Alphonso Taft, Reuben R. Springer, Esq.; Murat Halstead, Esq.; Richard Smith, Esq.; Ex-Governor R. M. Bishop, Ex-Governor J. D. Cox, Hon. George H. Pendleton, U. S. Senator; Washington McLean, Esq.; Hon. Fred Hassaurek, and Rev. Dr. I. W. Wiley, Bishop Methodist Episcopal Church.

Secretary: Col. W. L. DeBeck.

Advisory Board: Hon. Judge Warren Higley, Hon. Judge J. W. Fitzgerald, Prof. John B. Peaslee, Superintendent Public Schools; Ex-Governor E. F. Noyes, Rev. Dr. Max Lilienthal, and President and Secretary of Association.

#### SCIENTIFIC BRANCH COMMITTEE.

Chairman: Hon. Judge Warren Higley.

Secretary: Alfred A. Springer, M. D.

Members: Dr. John A. Warder, Prof. F. W. Clarke, Prof. Adolph Leu , Prof. John B. Peaslee, Superintendent Public Schools Rev. Dr. Max Lilienthal, August Leu , Esq.

A county association was formed with representatives in various townships, which interested many persons living in them, and resulted in plans for the adornment of streets and highways by tree planting, and the prominence given to the subject through the press, tended still further to increase this interest. In these publications Col. DeBeck, who was connected, with the press, took a most active part.

It was decided to appoint a National Convention of those interested in the subject of Forestry, to meet at Cincinnati on the 25th of April, 1882, and to continue five days; and applications were made to Congress and to the State Legislatures for aid in meeting the expenses. These efforts met with some encouragement, but did not finally succeed. In the meantime, invitations were sent out to persons throughout the United States and Canada, urging their attendance and co-operation, and Governor Foster, in pursuance of a law passed for the purpose, appointed the 27th day of April, as "*Arbor Day*."

This day in Cincinnati was to be observed in a particular manner, by the planting of "Memorial Trees," in honor of many distinguished persons living and deceased in *Eden Park*. For this occasion extensive and well arranged preparations were made, and afterwards carried out with precision and success. The business meetings of the Convention were appointed to be held at the Gibson House, and the public meetings at Springer Music Hall. In these arrangements, especially as relating to the ceremonies at Eden Park, and at the Hall, the ladies of Cincinnati took an active part. Banners bearing in green the device of an oak leaf, and the words, "Welcome Foresters," were displayed by thousands, as the appointed day arrived, and committees had prepared a programme of the proceedings and made various arrangements for the occasion.

FIRST DAYS' SESSION OF THE AMERICAN FORESTRY CONGRESS,  
MUSIC HALL, CINCINNATI, OHIO,

*Tuesday, April 25, 1882.*

In accordance with a general publication, and the previous arrangements of the Local Committee, the First Session of the American Forestry Congress, met in Springer Music Hall, at 10 A. M., this 25th day of April, 1882.

On motion of Prof. J. B. Peaslee, Gen. E. F. Noyes, was elected temporary Chairman, and Dr. A. A. Springer, temporary Secretary of the Congress.

On motion of Chairman Noyes, the following gentlemen were appointed a committee for permanent organization: Dr. F. B. Hough, Dr. John A. Warder, Dr. Geo. B. Loring, Gen. C. C. Andrews, Mr. John H. McMacken, Hon. Warren Higley, Dr. J. M. Waldea, Prof. Wm. Saunders, Gen. Dubin Ward, and Dr. A. A. Springer. The Congress thereupon took a recess until 8 o'clock, P. M.

EVENING SESSION.

The Congress convened at 8 o'clock, Gov. Noyes presiding, who introduced Gen. Dubin Ward, who in the absence of Mayor Means, welcomed the delegates and other strangers to the city.

Gov. Charles Foster followed Gen. Ward, welcoming the visitors to the hospitalities of Ohio.

The Committee on Permanent Organization, then reported the following Constitution and By-Laws, and permanent officers for the present year.

#### FIRST CONSTITUTION.

ARTICLE I. This Association shall be known as the AMERICAN FORESTRY CONGRESS.

ARTICLE II. The object of this Congress shall be to encourage the protection and planting of forest and ornamental trees, and to promote forest culture.

ARTICLE III. Any person may become a member of this Congress on the payment of two dollars. The annual assessment on each member shall be one dollar.

ARTICLE IV. The officers of the Congress shall be a President, a Vice-President from each State and Territory in the United States, and for each Province in Canada; a Recording Secretary, a Corresponding Secretary, a Treasurer, an Executive Committees, District Committee, Committee on Annual Meeting, Local Committee.

ARTICLE V. There shall be an annual meeting, which shall be held at such time and place as the Congress may determine.

ARTICLE VI. *Section 1.* All officers of this Congress, except as hereinafter provided, shall be elected annually, at the annual meeting, and shall hold office for one year, and until their successors shall be elected.

*Sec. 2.* The Presidents of the several State, Territorial and Provincial Associations, shall be the Vice-Presidents of the Congress after the current year.

*Sec. 3.* The Executive Committee shall be composed of the President, Recording and Corresponding Secretaries of this Congress, one District Delegate from each of the districts hereinafter named, to be appointed by the President and ratified by the Congress, together with the Corresponding Secretary of each State, Territorial and Provincial Association.

*Sec. 4.* The Corresponding Secretaries of the State, Territorial and Provincial Associations, within each district, shall be a District Committee, of which the respective District Delegate shall be a member, and the Chairman thereof.

ARTICLE VII. *Section 1.* The President shall preside at all meetings of the Congress, and deliver an annual address.

*Sec. 2.* The Recording Secretary shall keep a record of the proceedings of the Congress, and shall be the custodian of all papers and documents ordered to be preserved, which shall be arranged, for convenience of reference.

*Sec. 3.* The Corresponding Secretary shall conduct the correspondence of the Congress.

*Sec. 4.* The Treasurer shall have charge of all funds, and pay out the same on the direction of the Congress, on orders signed by the President and Recording Secretary.

ARTICLE VIII. The following groups of States, Territories, and Provinces, shall comprise the several districts:

*1st District:* The New England States, and the State of New York.

*2d District:* New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, Virginia, and West Virginia.

*3d District:* Ohio, Indiana, Michigan, Kentucky, and Tennessee.

*4th District:* North Carolina, South Carolina, Georgia, Alabama, and Florida.

*5th District:* Wisconsin, Minnesota, Dakota, Wyoming, and Montana.

*6th District:* Illinois, Missouri, Iowa, Nebraska and Kansas.

*7th District:* Mississippi, Louisiana, Texas, Arkansas, and Indian Territory.

*8th District:* Colorado, Mexico, Utah and Arizona.

*9th District:* California, Nevada, Oregon, Washington Territory, and Idaho.

*10th District:* Quebec and Maritime Provinces.

*11th District:* Ontario and Western Provinces.

ARTICLE IX. *Section 1.* The Committee on Annual Meeting, shall be composed of the President and Corresponding and Recording Secretaries of the Congress, and the District Committee within whose district the annual meeting of the Congress shall be held, whose duty it shall be to prepare a programme of exercises, and assign to their proper divisions all essays or papers prepared for the Congress.

*Sec. 2.* The Local Committee shall be appointed by the President at each annual meeting, subject to the ratification of the Congress, and a majority of the members of such Committee, shall reside in the vicinity of the place where the next succeeding annual meeting of the Congress shall be held, whose duty it shall be to make all necessary arrangements for the meeting of the Congress, and the accommodation of the Delegates.

ARTICLE X. The Congress may appoint Delegates to kindred

Associations, and between the annual meetings the President, Corresponding and Recording Secretaries, shall be a Committee, with power to appoint such Delegates.

ARTICLE XI. This Constitution may be amended by a majority vote of the members present, (and voting,) at any annual meeting.

The above Constitution was the adopted, section by section, an article at a time, and affirmatively adopted as a whole. The following officers were then unanimously elected to serve during the ensuing year:

President: George B. Loring, Salem, Mass.

Vice-Presidents: First District—Maine, George Sawyer, (Wiscasset;); New Hampshire, George W. Riddle, (Manchester;); Vermont, M. C. Buckham, (President Vermont University, (Burlington;); Massachusetts, N. H. Egleston, (Williamstown;); Rhode Island, H. G. Russell, (East Greenwich;); Connecticut, Prof. B. G. Northrop, (Clinton;); New York, Horatio Seymour, (Utica.)

Second District—New Jersey, Prof. George H. Cook, (New Brunswick;); Pennsylvania, Thomas Meehan, (Germantown;); Delaware, Wm. H. Purnell, (Newark;); Maryland, Gov. W. H. Hamilton; District of Columbia, John Saul, (Washington;); Virginia, W. H. Wickham, (Richmond;); West Virginia, Hon. Henry G. Davis, (Piedmont.)

Third District—Ohio, John Simpkinson, (Cincinnati;); Indiana, Prof. Ingersoll, (Lafayette;); Michigan, Prof. W. J. Beal, (Lansing;); Kentucky, Cassius M. Clay, (Whitehall;); Tennessee, Prof. J. M. Safford, (Nashville.)

Fourth District—North Carolina, S. D. Kelsey, (Highlands;); South Carolina, Hon. D. Wyatt Aiken, (Cokesbury;); Georgia, Richard Peters, (Atlanta;); Alabama, Dr. Charles Mohr, (Mobile;); Florida, J. G. Knapp, (Limona.)

Fifth District—Wisconsin, W. E. Smith, (Madison;); Minnesota, George L. Becker, (St. Paul;); Dakota, H. M. Thompson, (Lake Preston;); Wyoming, John W. Hoyt, (Cheyenne;); Montana, C. W. Lombard, (Missoula.)

Sixth District—Illinois, Arthur Bryant, Sr., (Princeton;)



Missouri, S. M. Tracy, (Columbia;) Iowa, Charles E. Whiting, (Whiting;) Nebraska, R. W. Furnas, (Brownville;) Kansas, George C. Brackett, (Lawrence.)

Seventh District—Louisiana, ———; Arkansas, Prof. F. L. Harvey, (Fayetteville;) Texas, G. G. Georgeson, (College Station;) Indian Territory, J. Forman, (Muskogee.)

Eighth District—Colorado, Prof. E. E. Edwards, (Ft. Collins;) New Mexico, (———;) Arizona, (———;) Utah, J. E. Johnson, (St. George.)

Ninth District—California, Robert E. C. Stearns, (Berkeley;) Nevada, (———;) Oregon, J. B. Dufur; Washington Territory, (———;) Idaho, (———.)

Tenth District—Quebec, Wm. Little, (Montreal.)

Eleventh District—Ontario, D. W. Beadle, (St. Catherines.)

*Recording Secretary:* W. L. DeBeck, Cincinnati, Ohio.

*Corresponding Secretary:* D. D. Thompson, Cincinnati, Ohio.

*Treasurer:* John A. Gano, Cincinnati, Ohio.

The following gentlemen were then elected Presidents of the different Sections:

*Section A*—"Uses of Forests," Dr. FRANKLIN B. HOUGH.

*Section B*—"Conservations and Practical Forestry," Dr. JOHN A. WARDER.

*Section C*—"Beneficial and Injurious Influences of Forestry," Prof. WILLIAM SAUNDERS.

*Section D*—"Education," Mr. N. H. EGLESTON.

Each President was requested to appoint a Secretary to his own Section, and the following were thus designated, viz:

In Section "A," Mr. WILLIAM LITTLE; in Section "B," Mr. S. W. EMERY; in Section "C," Prof. ROBERT B. WARDER; and in Section "D," Prof. ADOLPH LEUÉ.

The President, George B. Loring, then assumed his position and delivered quite a lengthy address.

Adjourned to the same place.

SECOND DAYS' SESSION, MUSIC HALL,  
CINCINNATI, OHIO,

Wednesday, April 26, 1882.

In general session, Gov. Charles Foster and others spoke, and announcements were made as to the arrangements for the day, upon which the meeting adjourned for meeting in Sections, in various rooms assigned for this use in Music Hall. The titles of papers offered for reading and discussion, having been previously printed by direction of the Local Committee, were assigned to the various Sections, as follows:

*Papers assigned to Section "A."*

1. The Forestry of the Future—FRANKLIN B. HOUGH, Chief of Forestry Division, Department of Agriculture.
2. The Southern Pine—DR. CHARLES MOHR, Mobile, Ala.
3. The Walnut Tree—WILLIAM H. RAGAN, Clayton, Ind.
4. Distribution of Canadian Trees—A. T. DRUMMOND, Montreal, Canada.
5. Flora of the Black Hills—ROBERT DOUGLAS, Waukegan, Illinois.
6. Pine Forests of Canada—JAMES LITTLE, Montreal, Canada.
7. Arboreal Flora of Arkansas—Prof. F. L. HARVEY, Fayetteville, Arkansas.
8. Profitable Trees for Florida—Hon. J. G. KNAPP, Limona, Florida.
9. Forests of Michigan—Prof. V. M. SPALDING, Ann Arbor, Michigan.
10. Forest Reserves at the Head Waters of the Ohio—M. C. READ, Hudson, Ohio.
11. Roadside Planting for Utility—CHARLES GARFIELD, Grand Rapids, Michigan.
12. Trees of Texas—T. V. MUNSON, Denison, Texas.
13. Suggestions Regarding Government Assistance—Prof. WM. BROWN, Guelph, Ontario.
14. Historical Sketches of the Development of the Forest Policy in Germany—BERNHARD E. FERNOW, Lehigh's Furnace, Slatington, Pa.

15. Preservation of Timber—Prof. F. W. CLARKE, Cincinnati, Ohio.

*Papers assigned to Section "B."*

16. The Work of Western Nurserymen, Present and Prospective—S. W. EMERY, Lake City, Michigan.
17. Culture and Management of Our Native Forests—H. W. S. CLEVELAND, Chicago, Illinois.
18. Three-Motion Plan of Planting—ROBERT DOUGLAS, Waukegan, Illinois.
19. The Wild Cherry Tree—Hon. HORATIO SEYMOUR, Utica, New York.
20. Useful Trees of Michigan—Prof. W. J. BEAL, Lansing, Michigan.
21. The Catalpas—J. C. TEAS, Carthage, Missouri.
22. Cheap Hardy Trees for the Prairies—J. T. ALLAN, Omaha, Nebraska.
23. Woody Plants of Ohio—D. L. and JOS. F. JAMES, and Dr. WARDER.

*Papers assigned to Section "C."*

24. Forests and Health—Dr. DANIEL MILLKIN—Hamilton, Ohio.
25. Climatology and Forestry—Dr. GEORGE L. ANDREW, Laporte, Indiana.
26. Forestry and Rainfalls—A. SAUNDERS PIATT, Mackeheck, Ohio.
27. Torrents and Torrential Floods—D. D. THOMPSON, Cincinnati, Ohio.
28. Evils of Woods Pasture—Dr. J. A. WARDER, North Bend, Ohio.
29. Droughts, Famines and Floods in China—DAVID H. BAILY, Late Consul General of the United States in China.
30. Forest and Rainfall in Ontario—Prof. WM. BROWN, Guelph, Ontario.

*Papers assigned to Section "D."*

31. The Necessity for a School of Forestry in the United States, Gen. C. C. ANDREWS, St. Paul, Minnesota.
32. What is a Forest-Tree in the Eye of the Law?—GEORGE C. BRACKETT, Lawrence, Kansas.
33. Management and Culture of the Locust—WALDO F. BROWN, Oxford, Ohio.
- ✓ 34. Measures of Locust Trees—Dr. J. A. WARDER, North Bend, Ohio.
35. Culture of the Locust on Long Island—JOHN S. HICKS, Roslyn, Long Island.
36. Educational Means—B. O. M. DEBECK, Cincinnati, Ohio.
37. A Suggestion from the Schools of Bavaria—Prof. R. B. WARDER, North Bend, Ohio.
38. Forest Administration in Germany—ROBERT KUEHNERT, Cincinnati, Ohio.
39. Lessons from Australia and Scotland—Prof. WILLIAM BROWN, Guelph, Ontario.
40. Suggestions Respecting a Text Book on Forestry—Prof. WILLIAM BROWN.

*Papers not classified, and some of them read only by Titles, in General Session.*

41. Advantages resulting from the Preservation of Forests—BARON RICHARD VON STEUBEN, Forester, German Empire.
42. Forestry in America—ISAAC SMUCKER, Newark, Ohio.
43. Forests and Trees of Northern Georgia—H. C. FREEMAN, C. E., Eljay, Georgia.
44. Woods of Indian Territory—J. FOREMAN, Muscogee, Indian Territory.
45. Growth and Destruction of Forests—Dr. A. C. HUMPHREYS, Galesburg, Illinois.
46. Climatology and Forestry—Prof. C. S. INGERSOL, Lafayette, Indiana.
- 47. Trees of Southern California—WM. HEAVER, Los Angeles, California.

48. Complaint of Diana—Poem—HORACE J. SMITH, Nordhoff, California.
49. Why Should we Plant Trees?—Dr. A. EBY, Seringville, Ontario.
50. The Poplars and Cottonwoods—Prof. SERENO WATSON, Cambridge, Mass.
51. Tree Planting—SIMEON EBY, Lancaster, Pa.
52. Wind-Breaks on the Prairies—Hon. C. E. WHITING, Whiting, Iowa.
53. Beneficial Effects of Wind-Breaks—L. B. WING, Newark, Ohio.
54. State Commissioners and State Arboreta—Prof. W. R. LAZENBY, Columbus, Ohio.
55. Timbers in Illinois—G. W. MINIER, Minier Illinois.
56. Trees growing upon the Plains of Colorado, how Influenced by Climate, Attitude and Irrigations—D. S. GRIMES, Denver, Colorado.
57. Nature's Plan for Reproduction—LEO WELTZ, Wilmington, Ohio.
58. "Natur Verjungung"—Prof. ADOLPH LEUFÉ, Cincinnati, O.
9. Colorado Hardy Conifers in Cultivation—THOS. DOUGLAS, Waukegan, Ill.
60. Colorado Conifers in Eastern Nebraska—J. MASTERS, Nebraska City, Neb.
61. Experiments in Planting on Cape Cod—JAMES S. FAY, Boston, Mass.
62. "Wald Verwuestung, Wald Erhaltung, Kuntsliche Bewaldung"—K. LUDLOFF, Milwaukee, Wis.
63. Wind-Breaks on the Prairies—SUEL FOSTER, Muscatine, Iowa.
64. Pines of New England—JOHN ROBINSON, Salem, Mass.
65. Grouping in Forestry—Dr. J. A. WARDER, North Bend, Ohio. ✓
66. Sylva and Plantations of Nebraska—Ex-Gov. R. W. FURNAS, Brownville, Neb.

- ✓ 67. Nurse-Plants in Forests—Dr. J. A. WARDER, North Bend, Ohio.
68. Evergreens on the Prairies—SAMUEL EDWARDS, Mendota, Illinois.
69. Planting by Railroads—ROBERT DOUGLAS, Waukegan, Ill.
70. Iowa's Work in Tree Planting—Prof. J. L. BUDD, Ames, Iowa.
- ✓ 71. Cheap Trees as a Shelter for Better Kinds—Dr. J. A. WARDER, North Bend, Ohio.
72. Mixed Plantations—Dr. J. A. WARDER, North Bend, Ohio.
73. Native Stock for Prairie-Planting—GEORGE H. WRIGHT, Sioux City, Iowa.
74. Anti-Miasmatic Influences—F. L. OLMSTEAD, Brookline, Mass.
75. Lessons to be learned from the Forests of Western Asia—Prof. H. S. OSBORN, LL. D., Oxford, Ohio.
76. Injurious Insects—Prof. C. V. RILEY, Washington, D. C.
77. Forest Insects—Prof. W. SAUNDERS, London, Ontario.
78. Arnold Arboretum—JOHN ROBINSON, Salem, Mass.
79. Experimental Forest Stations—Prof. A. LEUE, Cincinnati, Ohio.
80. Trees of Worship among the Ancient Greeks—Prof. EDWARD NORTH, Clinton, N. Y.
81. Romance of Forests—Gen. DURBIN WARD, Cincinnati, Ohio.
82. Distribution of Conifers in the United States—Dr. GEORGE VASEY, Washington, D. C.
83. The Cultivation of the White Mulberry—S. R. LOWERY, Huntsville, Ala.
84. Profits of Durable Trees—Dr. A. FURNAS, Danville, Ind.
85. Forests and Waters-Supply—VERPLANCK COLVIN, Superintendent Adirondack Survey, Albany, N. Y.
86. Forest-Tree Culture in California—ROBERT E. C. STEARNS, Ph. D., Berkeley, Cal.
87. On the Growth of certain California Forest Trees, and the Meteorological Inferences suggested thereby—ROBERT E. C. STEARNS, Ph. D., Berkeley, Cal.

In the afternoon an address was delivered in Garfield Place, by Hon. H. L. MOREY, M. C., after which memorial trees were planted.

#### THIRD DAY'S SESSION.

MUSIC HALL, CINCINNATI, OHIO,  
*Thursday, April 27, 1882.*

The Sections met and continued the reading of papers until the hour arrived for the commencement of proceedings appointed for Arbor Day, arrangements having been made at Eden Park, and the day having been designated as a holiday by proclamation of the Governor, under authority of law. After the planting, addresses were delivered by Dr. GEO. B. LORING, Hon. CASSIUS M. CLAY, and others.

In the evening a reception was given by the ladies of Cincinnati at Music Hall, at which addresses were delivered by Gen. CASSIUS M. CLAY, Gov. E. F. NOYES, and others. The meeting then adjourned till 10 A. M. the next day.

#### FOURTH DAY'S SESSION.

MUSIC HALL, CINCINNATI, OHIO,  
*Friday, April 28, 1882.*

The Congress met in Sections at 10 o'clock, A. M., Vice-President JOHN SIMPKINSON presiding. The morning was spent in the reading of papers and in discussions upon Forestry subjects. In the afternoon trees were planted in Washington Park, and addresses delivered by Gen. A. TAFEL, Judge WARREN HIGLEY, and others. A portion of the members met at Music Hall and continued the reading and discussion of papers.

#### FIFTH DAY'S SESSION.

MUSIC HALL, CINCINNATI, OHIO,  
*Saturday, April 29, 1882.*

The session was continued, and the time and place of the next meeting were fixed. The Congress agreed to meet at the city of Montreal, Canada, on the 21st and 22d days of August, next.

Mr. WILLIAM LITTLE was appointed as Vice-President, and requested to make such arrangements as might be necessary for the occasion. The following committees were appointed :

1. *To report upon Forest Experimental Stations.*—Prof. A. Leue, Mr. V. Colvin, Dr. F. B. Hough, Dr. Charles Mohr, Mr. D. W. Beadle, Dr. J. A. Warder, and Prof. Wm. Saunders.

2. *To memorialize State Legislatures upon the establishment of State Forestry Commissions.*—Dr. F. B. Hough, Prof. Wm. R. Lazenby, Prof. C. S. Sargent, Dr. J. A. Warder, Prof. Wm. J. Beal, Hon. Cassius M. Clay, and Prof. J. M. Safford.

3. *To report upon Forest Fires and the Injuries to Forests by Cattle.*—Dr. Charles Mohr, Mr. N. H. Eggleston, Mr. Henry C. Sigles, Prof. R. C. Kedzie, Hon. Horace Wilson, Mr. V. Colvin, Hon. H. G. Joly, and Prof. Wm. Brown.

4. *To report upon Best Methods of Planting.*—Mr. A. W. Butler, Mr. J. Jenkins, Hon. L. B. Hodges, Dr. A. Furnas, and Mr. Thomas Douglas.

5. *To report upon Forestry Education.*—Gen. C. C. Andrews, Prof. A. Leue, Prof. V. M. Spalding, Mr. B. E. Fernow, and Prof. R. B. Warder.

After various resolutions of thanks to the citizens of Cincinnati for the satisfactory manner in which they had originated this meeting, and contributed to its interests, the Congress adjourned, to meet at Montreal on the 21st day of August, next.



## MONTREAL MEETING.

### PROCEEDINGS OF THE FIRST DAY.

MONTREAL, CANADA,

*August 21, 1882.*

Pursuant to adjournment, at the close of its first meeting at Cincinnati, (April 29, 1882,) the American Forestry Congress met at Montreal, at No. 132 St. James street, in rooms provided by Mr. WILLIAM LITTLE, Vice-President, and designated as "Forestry Chambers."

Besides a large number who met for the occasion, including many who had joined the society at its first meeting, the following persons attended as representatives of the Ontario Government, viz; Mr. JAMES MILLS, Prof. WILLIAM SAUNDERS, Mr. P. C. DEMPSEY, Mr. D. W. BEADLE, and Mr. THOMAS BEALL.

The Department of Crown Lands of Ontario was specially represented by Mr. G. B. COUPER, Superintendent of Woods and Forests for the Province.

The Hon. ALFRED PARE, Superintendent of Woods and Forests of the Province of Quebec, by letter dated August 19, 1882, informed the Committee of Arrangements that E. E. TACHE, Esq., Assistant Commissioner of Crown Lands; A. J. RUSSELL, Esq., Crown Timber Agent, Ottawa; CHARLES E. BELLE, Esq., Crown Timber Agent, Montreal; and EUGENE RENAULT, Esq., Crown Timber Agent, Montmaguey, had been named as the representatives of the Government of that Province at the Forestry Congress.

The hour of meeting being agreed upon as at 2 o'clock, p. m., and the President being absent, the Congress was called to order by Dr. FRANKLIN B. HOUGH, and the Hon. H. G. JOEY, of Quebec, was chosen temporary President.

The Secretaries elected at the first meeting not attending, and both having resigned, Dr. FRANKLIN B. HOUGH, of Lowville, N. Y., was chosen temporary Secretary.

The Treasurer elected at the first meeting having resigned, Dr. CHARLES MOHR, of Mobile, Ala., was chosen temporary Treasurer.

The temporary President briefly announced the plan of organization, and the distribution of subjects for discussion in Sections.

Upon motion, the following members of the Congress were appointed a committee to confer with a committee of the American Forestry Association upon the question of consolidation of the two organizations, viz: Dr. CHARLES MOHR, Mr. BERNHARD E. FERNOW, and Prof. WILLIAM SAUNDERS. The general session then adjourned until 10 o'clock to-morrow morning, and the meeting resolved itself into Sections.

A programme had been prepared before the session commenced, bearing the following list of papers, which had been entered for reading. In several instances in which the authors were absent, they were read by the Secretaries.

#### PAPERS ENTERED FOR READING.

1. Forest Fires—JOSEPH S. FAY, Wood's Holl, Mass.
2. The Distribution of Hard-Wood Trees in the Gulf Region of the Southern States—Dr. CHAS. MOHR, Mobile, Ala.
3. Tree Planting by Railroad Companies—F. B. HOUGH, Ph. D., Lowville, N. Y.
4. The Rational Method of Tree Planting—N. H. EGGLESTON, Wilhamstown, Mass.
5. The Russian Mulberry—D. C. BURSON, Topeka, Kan.
6. The Larix Europea, (European Larch,) its Quick Growth, Adaptability, Propagation and Culture—DAVID NICOL, Cataraqui, Ont.
7. The Coppice for the Village and Town—M. C. READ, Hudson, Ohio.
8. Forest Trees most suitable for Streets, Lawns and Groves—J. BEAUFORT HUMPHURT, Ottawa, Ont.
9. The Destruction of Forests and Tree-Planting—JOHN DOUGALL, Editor of New York *Witness*.

10. The Introduction of Trees and Shrubs at the Ontario Experimental Farm—Prof. WILLIAM BROWN, Guelph, Ont.
11. A few Thoughts on the Necessity for a Certain Portion of each Farm being left in Forest—J. BEAUFORT HURLBURT, LL. D., Ottawa, Ont.
12. Forest Economy of Canada—STEWART THAYNE, Ottawa, Ont.
13. Experimental Plantation of the Eucalyptus, near Rome—FRANKLIN B. HOUGH, Ph. D., Lowville, N. Y.
14. Conditions of Forest Growth—BERNHARD E. FERNOW, Slatington, Pa.
15. Lessons to be Learned from the Forests of Western Asia—Prof. H. S. OSBORN, Oxford, Ohio.
16. Borers in Forest Trees—Rev. THOMAS W. FYLES, Cowansville, Quebec.
17. How Farmers may grow Forest Trees from Seed—D. W. BEADLE, St. Catharines, Ont.
18. On the Growth of Black-Walnut Timber in Ontario—THOMAS BEALL, Lindsay, Ont.
19. On the Growth of Poplar Trees for the Manufacture of Paper and Charcoal—W. SAUNDERS, Longdon, Ont.
20. A few Practical Remarks from the Lumberman's Standpoint—J. K. WARD, Montreal.
21. Oaks of Hardin County, Ohio—W. F. ENGLISH, Mount Victory, Ohio.
22. Tree-Planting for Railroads—Dr. JOHN A. WARDER, North Bend, Ohio.
23. Timber-Trees of the Black Hills—ROBERT DOUGLAS, Waukegan, Ill.
24. Remarks on the Canadian Cultivation of the *Catalpa speciosa*—ROBERT BURNET, Picton, N. S.
25. The Coniferous Trees of the United States and Canada—Dr. GEO. VASEY, Botanist of Department of Agriculture, Washington, D. C.
26. Black-Locust Growths—Dr. JOHN A. WARDER, North Bend, Ohio.

27. Experiments in Tree-Planting on Cape Cod—JOSEPH S. FAY, Wood's Holl, Mass.
28. The Ash—ARTHUR BRYANT, Princeton, Ill.
29. Larchmere, a Plantation on Drifting Sands—Dr. JOHN A. WARDER, North Bend, Ohio.
30. Three-Motion Plan of Planting—ROBERT DOUGLAS, Waukegan, Ill.
31. Extensive Planting by Shelter-Belts—H. M. THOMPSON, Lake Preston, Dak.
32. Classification of Oaks—Dr. JOHN A. WARDER, North Bend, Ohio.
33. A Western Greeting—JAMES T. ALLAN, Omaha, Neb.
34. Forest-Tree Plantation—B. F. PECK.
35. Trees, Tree-Planting, &c.—J. A. MATHEWSON, Little Metis, Quebec.
36. Planting on the Plains, &c.—H. M. PENNEL, Russell, Kan.
37. Timber Culture a National Necessity—D. C. SCOFIELD, Elgin, Ill.
38. Rural Improvement—B. G. NORTHROP, Clinton, Conn.
39. The Commercial Value of Pruning—JOHN S. HICKS, Roslyn, N. Y.
40. Apology for the Pioneers—JOHN W. CALDWELL, Cincinnati, Ohio.
41. Living Fence-Posts—WILLIAM H. RAGAN, Clayton, Ind.
42. Roadside Tree-Planting—W. A. HALE, Sherbrooke, Que.
43. Letter upon Forestry—D'AILLY, Malvern, Ark.
44. Fungi Injurious to Forest Trees—BYRON D. HALSTED, New York.
45. Forests in Connection with Water, as Aids to Climatic Amelioration—T. T. LYON, South Haven, Mich.
46. Forests of the United States, as shown by the Census of 1880—N. H. EGLESTON, Williamstown, Mass.
47. Forest-Cultural Survey, &c.—General WILLIAM BURNS, U. S. A.
48. Economic Tree-Planting; How and Where?—B. GOTT, Arkona, Ont.

49. The True and False in Aboriculture—WILLIAM ROBB, Montreal, Que.
50. The Mills of West Fork—J. JENKINS, Winona, Ohio.
51. Individual Effort in Preserving and Propagating Trees  
Dr. REGINALD A. D. KING, Compton, Que.
52. Profitable Forest Culture—C. E. THORNE, Springfield, Ohio.
53. What to Plant for Forest Trees, for Groves and for Wind-Breaks—SUEL FOSTER, Muscatine, Iowa.
54. Canada's Forests, and her Future as a Steel-Producer—EDWARD HAYCOCK, Ottawa, Ont.
55. Climatological Range and Geographical Distribution of Forests, and the Climates Favorable to them—J. BEAUFORT HURLBURT, LL. D., Ottawa, Ont.
56. Plan of Instruction in an American School of Forestry—Prof. ADOLPH LEUE, Cincinnati, Ohio.
57. The Relation of Forests to Agriculture—A. G. HUMPHREYS, M. D., Galesburg, Ill.
58. Forestry from a Hygienic Standpoint—HENRY HOWARD, M. D., Montreal.
59. Some Notes and Remarks on the Denudation of our Forests—G. L. MARLER, Montreal.
60. How the Forests of the Eastern Townships was Broken up—A Brief History—Rev. T. W. FYLES, Cowansville, Que.
61. "Woodman, Spare the Tree."—The Forestry of the Niagra Section J. R. MARTIN, Cayuga, Ont.
62. Jessup Collection of Forest Products in Museum of Natural History, Central Park, New York—Prof. A. S. BICKMORE, New York.
63. Legislation upon Forestry—P. J. U. BEAUDRY, Beauharnois, Que.
64. On the Needs of Forestry—E. MCGILLIVRAY, Ottawa, Ont.

## PROCEEDINGS IN SECTIONS.

### *Section A.*

President: Dr. FRANKLIN B. HOUGH.

Secretary: WILLIAM LITTLE.

The papers numbered 1, 2, 3, 4, 5, 6, 7, 8, and 9 on the programme were read and discussed.

### *Section B.*

President: Dr. JOHN A. WARDER.

Secretary: Hon. E. H. SPRING RICE.

The papers numbered 22, 24, 27, 30, and 36 on the programme were read and discussed.

### *Section C.*

President: Prof. WILLIAM SAUNDERS.

Secretary: THOMAS S. TYLER.

The papers numbered 39, 40, 49, 52, and 60 on the programme were read and discussed.

### • EVENING SESSION.

Pursuant to public notice, a meeting was held at Queen's Hall, at 8 o'clock, p. m., at which the public generally were invited. The hall had been tastefully decorated for the occasion, with rare potted plants in bloom, and upon the tables were arranged bouquets of rare exotics. Conspicuously behind the President's chair was the legend, "Woodman, Spare the Tree," and on either side were shields bearing the words, "American Forestry Congress, 1882," surrounded by the English and United States flags, entwined.

Cards of invitation bearing the device of the *Maple Leaf*, and printed upon very thin plates of wood, had been issued in great numbers. The city band played several pieces of music while the audience were taking their seats.

His Honor MAYOR BEADRY, presided, wearing the insignia of his office, and after a few words of welcome, introduced the Hon. H. G. JOLY, who addressed the meeting. This was followed by an address by Dr. FRANKLIN B. HOUGH. Mr. D. W. BEADLE and others had been invited to speak, but the lateness of the hour prevented.

# PROCEEDINGS OF THE SECOND DAY.

FORESTRY CHAMBERS, MONTREAL,

*Tuesday, August 22, 1882.*

The Forestry Congress met in general session at 10 o'clock, pursuant to adjournment, the Hon. H. G. JOLY, presiding.

Prof. WILLIAM SAUNDERS, from the Committee upon Consolidation, presented the following resolutions, which were adopted:

*Resolved*, That whereas, in the year 1875 an association was formed under the title of *The American Forestry Association*, having for its objects the collection and dissemination of information on the subject of Forestry, and the awakening of an interest in the public mind, of which association Dr. JOHN A. WARDER, of Ohio, was elected President; *And whereas*, That association, especially through the labors of its President, who has been most untiring in his efforts, and has spared neither time nor means in the zealous prosecution of his labors for the advancement of the science of Forestry, has been an important agency in calling into existence the society known as the *The American Forestry Congress*.

*And whereas*, The American Forestry Association is desirous of uniting with the American Forestry Congress, and thereby forming one society for the prosecution of the objects common to both;

Therefore, this Committee of Conference hereby recommends that the present members of the American Forestry Association be received as members of the American Forestry Congress, and that the funds in the treasury of the American Forestry Association be applied in payment of its own expenses.

Mr. BERNHARD E. FERNOW offered the following resolution, which was adopted:

Inasmuch as the Constitution of this Congress has been found not to meet the wants of its aims, in vital points, therefore

*Resolved*, That a committee of five members be appointed by the Chair to revise the Constitution, so as to adapt it to the wants of the Congress.

The Chairman appointed Mr. BERNHARD E. FERNOW, Dr. FRANKLIN B. HOUGH, Dr. JOHN A. WARDER, Mr. WILLIAM LITTLE, and Dr. CHARLES MOHR as such committee, and desired them to report in General Session to-morrow morning.

Upon motion, it was resolved that paper No. 20, upon the printed programme, entitled "*A few Practical Remarks from the Lumberman's Standpoint*," by Mr. J. K. WARD, of Montreal, be taken from its order and read in General Session. Mr. WARD then read his paper, which led to a discussion, upon the subject of "Forest Fires," in the course of which Dr. GEORGE B. LORING, President of the Congress, appeared and assumed the chair.

Dr. CHARLES MOHR, chairman of a Special Committee appointed at the Cincinnati meeting to report upon the subject of "Forest Fires" and "Injuries from Cattle," then read the following

#### REPORT.

Since the last adjournment of this Congress I have been prevented from communicating with other members of the committee, and find myself unprepared for presenting the results of joint deliberation. I will, however, venture to submit a statement of some facts that have come under my own observation in the lower portion of the Gulf States, and more particularly bearing upon the lumbering interests of the pine region.

Of these, as in other forests, it may be said, that fires have raged from year to year, causing much greater destruction than all of the past and present lumbering operations combined. The Indians practiced the setting of fire to woods before the settlement by whites began, partly for the driving of game, and partly for the removal of undergrowth that hindered its pursuit. The white settlers in preparing the wilderness for cultivation, acquired a habit of destruction to the utter disregard of the wants of the present and the future, which still continues



to a most needless extent, and to the great injury of private interests and of public welfare. Other fires are set through negligence, but one of their chief causes in early spring every year, is the intentional setting of fires to obtain a fresh growth of grass for the half-starved stock that has been roaming through the woods in the winter months.

This practice is wide-spread, and is persistently followed, notwithstanding the remonstrance of those who wish to follow a better usage, and who suffer most from this barbarous custom. To protect himself, the farmer who would do otherwise, must burn off around his own premises, when wind and weather permit. The lumbering operations of the country continually increase the danger, by leaving great quantities of waste inflammable products upon the ground, which seldom escape the flames, thus greatly extending the waste; but still greater injuries result from the fires set in the production of naval stores. In order to protect the boxed trees from running fires, it is customary to rake away the rubbish from around them and to set it on fire. On a windy day, such fires, escaping all limits, spread over hundreds of square miles, destroying all the Pine seedlings and younger growth.

These fires greatly injure the growth of the trees that survive, as will appear upon comparing the annual layers, in trees exposed, and in those protected, the former being so thin that they can scarcely be distinguished, while the latter are several times as thick.

Another most injurious effect is the burning out of the organic material in the soil, rendering it sterile upon the surface, to the destruction of the finer and more nutritious grasses, and able to produce only the coarser and more deeply rooting species. The second growth of scrubby Black-Jack and Turkey Oak that appears prevents the pines from getting started, and the leaves that fall from these oaks become fuel for ground fires, until the surface becomes utterly barren for any growth.

The Long-Leaved Pine is not necessarily succeed by a deciduous growth, but where the soil is suited to its wants, a vigorous growth of the same comes up where it has been cleared away; but where it is not as rich the Oaks above-mentioned and the Mocker-Nut will, if the fires are kept out, soon cover the ground, and in a few years they will become groves.

Individual efforts for the prevention of these evils can do nothing, and it is only by judicious legislation that relief can be had. The injuries from the unrestrained range of cattle are

scarcely less than those from fires, as well from browsing, as from breaking and tramping down. These damages are less apparent in a pine forest, because the leaves are not eaten, but the loss even there is enormous, and constantly runs to ruin. The most effectual remedy against this evil is an efficient stock-law, that shall compel the owners of cattle from ranging over the land of others. But hitherto, although such a law has been introduced in some counties, it has met with great opposition in Alabama. The measure has been earnestly discussed in Mississippi. In South Carolina, from information received through Dr. Ravenal, such a law was first introduced as optional to the counties, but its benefits became so apparent, that it has since been extended to the whole State. The opposition which came chiefly from the poorer population of the low country was gradually disappearing, and they were becoming reconciled to its operation, as the benefits became evident. Such a measure will confer the greatest benefit upon the country, and will give an impetus to the prosperity of the farming interests.

#### AFTERNOON SESSION—AUGUST 22.

The Congress assembled after recess, pursuant to adjournment. Mr. D. W. BEADLE moved the following resolution, which was adopted:

*Resolved*, That this meeting shall be considered in the history of this Association as its first annual meeting, and that members enrolled at this time shall be considered as original members of the organization.

The President, Dr. LORING, having called the Hon. H. G. JOLY to the Chair, delivered an address.

The following papers were then read in General Session:

17. How Farmers may Grow Forest Trees from Seeds; by D. W. BEADLE, of St. Catharine's, Ont.

18. On the Growth of Black Walnut Timber in Ontario; by THOMAS BEALL, Lindsay, Ont.

28. The Ash; by ARTHUR BRYANT, Princeton, Ill.

31. Extensive Planting of Shelter-belts; by H. M. THOMPSON, Lake Preston, Dak.

58. Forestry from a Hygienic Standpoint; by Dr. HENRY HOWARD, Montreal.

During the discussion that ensued upon the reading of this paper, the President withdrew, and the Hon. H. G. JOLY resumed the chair, and presided until final adjournment.

19. On the Growth of Poplar Trees for the Manufacture of Paper and Charcoal; By Prof. WILLIAM SAUNDERS, London, Ont.

63. Legislation upon Forestry; by P. J. U. BEAUDRY, Beauharnois, Que.

42. Roadside Tree-Planting; by W. A. HALL, Sherbrooke, Que.

53. What to Plant for Forest Trees, for Groves, and Wind-Breaks; by Hon. SUEL FOSTER, Muscatine, Iowa.

61. "Woodman, Spare the Tree"—The Forestry of the Niagra; by J. R. MARTIN, Cayuga, Ont.

14. Conditions of Forest Growth; by BERNHARD E. FERNOW, Slatington, Pa., (now of Oxford, N. J.)

The remainder of the papers upon the programme were read only by their titles, excepting No. 62, which was withdrawn by the author for reading at the session of the American Association for the Advancement of Science.

#### EVENING SESSION.--AUGUST 22.

A public meeting was held at Queen's Hall, at which the Hon. JOHN EATON, U. S. Commissioner of Education, made remarks, and the Hon. GEORGE B. LORING, delivered an address.

#### PROCEEDINGS OF THE THIRD DAY.

##### FORESTRY CHAMBERS, MONTREAL,

*Wednesday, August 23, 1882.*

Upon assembling at half-past nine o'clock, the Hon. GEO. BAYSON, from the committee appointed the day previous, to report upon the subject of forest fires, presented the following:

This committee recommends the following measures:

1. The reservation of all Pine and Spruce lands unfit for settlement, for lumbering purposes exclusively.
2. The prohibition of the burning of brush by settlers in the

vicinity of Fir trees during the months of May, June, September and October.

3. The division of the timber country into districts, and the appointment of a sufficient number of police, the superintendents of which force to have ample magisterial powers, and whose duty it would be to detect and punish offenders, and to provide for the extinguishment of fires.

4. The cost of maintenance of this protective force, might partially be met by the imposition of a moderate tax on the parties owning or leasing large areas of forest property, or conjointly with the respective governments interested in its preservation.

Mr. B. E. FERNOW, from the committee appointed to prepare amendments to the Constitution, presented the following draft of a new Constitution, which was read and adopted:

#### CONSTITUTION OF THE AMERICAN FORESTRY CONGRESS.

ARTICLE I. This Association shall be known as the AMERICAN FORESTRY CONGRESS.

ARTICLE II. The objects of this Congress shall be the discussion of subjects relating to tree planting; the conservation, management and renewal of forests; the climatic and other influences that affect their welfare; the collection of forest statistics, and the advancement of educational, legislative or other measures tending to the promotion of these objects. It shall especially endeavor to centralize the work done and diffuse the knowledge gained.

ARTICLE III. Any person may be elected a member of this Congress upon the recommendation of two members and the payment of two dollars. The annual fee shall be one dollar.

ARTICLE IV. The officers of this Congress, to be elected at the annual meeting, as follows: President, First Vice-President, Second Vice-President, Recording Secretary, Corresponding Secretary, Treasurer.

ARTICLE V. The President shall preside at all meetings of the Congress in General Session, and deliver an annual address at the close of his term.

ARTICLE VI. The Vice-Presidents, Secretaries and Treasurer, shall constitute an Executive Committee for the transaction of such business as may be required by this Constitution, or by a vote of the Congress.

ARTICLE VII. The Recording Secretary shall keep a record of the proceedings of the Congress, and shall be custodian of all documents, books and collections ordered to be preserved.

ARTICLE VIII. The Corresponding Secretary shall conduct the correspondence of the Congress.

ARTICLE IX. The Treasurer shall have charge of all funds, and pay out the same on the direction of the Executive Committee.

ARTICLE X. The Congress at any regular meeting, or its Executive Committee, in the intervals between its meetings, may appoint such local or special committees as may be deemed proper, and shall define their duties.

ARTICLE XI. The annual meeting of the Congress shall be in the month of August or September, at such times and places as shall be determined by a vote in General Session.

ARTICLE XII. At the close of each annual meeting there shall be an election of officers for the ensuing year, and they shall remain in office until others are chosen. In cases of vacancies occurring in the intervals between the annual meetings, they may be filled by the Executive Committee, until others are selected. In case of absence of an officer at a regular meeting his place may be deemed vacant.

ARTICLE XIII. The officers of States, Territories, Provinces, or Local Forestry Associations, or their delegates, or the de-

legates of any government may participate in the proceedings of the Congress as Honorary Members.

ARTICLE XIV. This Constitution may be amended by a two-thirds vote of the members present at any annual meeting.

Mr. D. W. BEADLE, then presented the following By-Laws, which were by a vote of the Congress, adopted:

#### BY-LAWS.

1. Papers or abstracts of papers to be read must be sent two weeks before any meeting, for classification, to the Corresponding Secretary.

2. The following classification of subjects is adopted for the reading of papers:

*Section A.* Forest Planting, Forest Management, Forestry Proper, Preservation of Forests.

*Section B.* Forest Economy, Technology and Statistics.

*Section C.* Applied Science and Climatology, General Topics.

3. Contributors who are present shall have the preference in reading their papers.

4. Any member shall be entitled to the privilege of using any books or documents, not of record, at the discretion of the Recording Secretary.

An election was then had for officers to supply the vacancies occasioned by resignation, and the following named persons were chosen to serve for the ensuing year, it being the will of this Congress that the office of President be not deemed vacant, inasmuch as but four months had elapsed since his election:

*First Vice-President:* Hon. H. G. JOLY, of Quebec.

*Second Vice-President:* Dr. JOHN A. WARDER, of North Bend, Ohio.

*Recording Secretary:* Dr. FRANKLIN B. HOUGH, of Lowville, New York.

*Corresponding Secretary:* Mr. WILLIAM LITTLE, of Montreal.

*Treasurer:* Mr. JOSEPH S. FAY, of Woods Holl, Mass.

On motion of Dr. F. B. HOUGH, the following resolution was adopted:

*Resolved,* That the Executive Committee be, and hereby is authorized and directed, to designate the time and place of the next annual meeting of this Congress, and to appoint the Local Committees, and make such other arrangements as may be necessary for that occasion.

Upon motion of Mr. J. S. HICKS, the following resolution was adopted:

*Resolved,* That the Executive Committee appoint referees to prepare papers upon the following subjects, and send them to the Corresponding Secretary like other papers:

1. Legislation in relation to Forest Fires.
2. Prevention and Control of Forest Fires.
3. Management of Burned Forests, and effect upon the Soil and Forest Growth.
4. Distribution of the White Pine.
5. Technology of the White Pine.
6. Forest Management of the White Pine.

Mr. ELEAZER WRIGHT, presented a verbal statement concerning recent measures that had been adopted, and that were in course of execution in Middlesex County, Mass., in forest-tree planting.

The thanks of the Congress were voted Mr. Wright, for this communication.

Mr. D. W. BEADLE, presented the following preamble and resolution, which were adopted:

*Whereas,* Many sections of our country are not represented in the American Forestry Congress, therefore,

*Resolved,* That the organization of Local Forestry Associations be encouraged by this Congress, and that our Constitution and papers be sent to persons interested in Forestry in these sections.

On motion of Dr. JOHN A. WARDER, it was

*Resolved,* That the thanks of this Congress are due, and are hereby tendered to Mr. C. E. Belle, Crown Lands Agent of Lower Ottawa Agency, Province of Quebec, for the opportunity

here afforded us for inspecting his large and beautiful collection of woods of Canada, elegantly prepared.

Upon motion of Mr. H. G. JOLY, it was

*Resolved*, That the interest shown by the ladies of America, in the work of this Congress, is most gratifying, and an encouragement to further exertions on our part.

On motion of Mr. WILLIAM LITTLE, it was

*Resolved*, That the thanks of this Congress are hereby expressed to the Geological Survey of Canada, for the present of a large a nearly complete series of the Maps and Reports of the Geological Survey of Canada, for preservation in the archives of this Congress.

Mr. WM. LITTLE, presented the following letter, which was read and ordered to be filed, and the thanks of the Congress were returned therefor:

CLUB HOUSE, MONTREAL,

AMATEUR ATHELETIC ASSOCIATION,

August 22, 1882.

DEAR SIR: The Directors of this Association have much pleasure in tendering the use of their Club House to the members during their stay in the city. Our library is extensive, and may, perhaps, prove useful.

Your obedient servant,

HORACE S. GIBBS, Secretary.

Upon motion of Mr. WM. LITTLE, it was

*Resolved*, That the thanks of this Congress are due to those gentlemen who have contributed papers to be read at this meeting, but who could not attend. It affords encouraging evidence of a growing and wide-spread interest in the subject of forestry, that promises the happiest results.

Mr. D. W. BEADLE, moved the thanks of the Congress, to Mr. H. G. Joly, for his services in presiding at this meeting—which motion being put by the Secretary, was unanimously adopted.

Mr. B. E. FERNOW, offered the following resolution, which was adopted:



The American Forestry Congress in closing its labors at Montreal, cannot adjourn without expressing its gratitude to the authorities of the Government, who have done so much to render our meeting successful. It therefore,

*Resolved*, That our thanks are due to the Governments of Ontario and Quebec, for the interest taken by them in sending Delegates to this Congress, for the purpose of aiding in our proceedings, and of reporting upon them.

Upon motion of Mr. JOHN S. HICKS, it was

*Resolved*, That we express our thanks to the Mayor of Montreal, and to its citizens generally, for the interest taken by them in our proceedings on this occasion.

Upon motion of Mr. W. HUDSON STEPHENS, it was

*Resolved*, That we return thanks to the Press, who have so kindly reported our proceedings, and who have published in full, many of the papers read during our meeting.

Upon motion of Mr. WM. LITTLE, it was

*Resolved*, That our thanks are due to the various Railway, Steamboat and Telegraph Companies, that have afforded facilities to our members in their attendance at this meeting, and especially to the following: The Grand Trunk, Great Western, Vermont Central, Delaware & Hudson, Intercolonial, Canadian Pacific, North Shore, South Eastern, Detroit, Grand Haven & Milwaukee, Flint and Pere Marquette, and Cincinnati Southern (C. N. O. & T. P. R. Co.) Railway Companies. The Richelieu and Ontario Navigation Company, and The Northwestern Telegraph Company.

Upon motion of Mr. LITTLE, the thanks of the Congress were voted to the Montreal Horticultural Society, for copies of its reports for distribution, and to Mr. John Lowell, for the use of his valuable library of Directories.

Upon motion of Dr. JOHN A. WARDER, it was

*Resolved*, That we are particularly indebted to Mr. JAMES LITTLE, of this city—the Nestor in American Forestry, for the earnest and persistent efforts that he has made, from an early period, in the discussions that have so largely contributed to the diffusion of knowledge upon the dangers that threaten our timber supplies, and that have in no small degree tended to the formation of public opinion that now finds expression in the efforts of the American Forestry Congress.

Upon motion of Dr. F. B. HOUGH, it was

*Resolved*, That we, in the most especial manner, express our thanks to Mr. William Little, Vice-President of this Congress, for the earnest, energetic and efficient manner, in which he has by his personal labors, his influence and his means, secured every preparation for our meeting that could be foreseen, and that have rendered it a complete success.

Mr. LITTLE, in a very feeling manner expressed his thanks particularly on behalf of his farther, Mr. James Little, for the resolution that had been passed concerning him.

The Congress then adjourned to meet as the Executive Committee might appoint, in August next.

FRANKLIN B. HOUGH,

*Recording Secretary.*

[The Recording Secretary deems it properly a part of the history of the Montreal Session of the American Forestry Congress, that due mention should be made of the services of Mr. William Little, in connection with the occasion, in the preparations that were made, and the work that was done.]

Besides the very large amount of correspondence which it involved, he provided for the use of the Congress a whole suite of furnished rooms at "Forestry Chambers," for the sessions—the hire of Queen's Hall for two evenings, and all the printing needed before and during the meetings. He also secured the printing of a large edition of two numbers of the "*Montreal Herald*," making in all sixteen folio pages, exclusively devoted to these proceedings. For these and other expenses, no claims were presented to the Society, and no aid was asked from his fellow citizens. Very many of the members attending were also placed under personal obligations to him for aid in securing accommodations at a time when the hotels were crowded, and for other attentions which strangers cannot readily secure.]

## THE AMERICAN FORESTRY ASSOCIATION.

[In order to render this first publication of the American Forestry Congress complete, we present the following account of the *American Forestry Association*, which was united with it by resolutions, at Montreal, on the 22d of August, 1882.—H.]

In the year of 1875, a call was circulated among persons interested in Forestry, inviting them to sign for the appointment of a meeting, with the object of forming an organization for the promotion of this subject.

In pursuance of this call, a large body of intelligent men met on the 10th of September, of that year, at Chicago, and organized what is known as "THE AMERICAN FORESTRY ASSOCIATION." At this meeting, Dr. JOHN A. WARDER, of Ohio, was chosen President, and Prof. HENRY H. McAFEE, Secretary.

At the Chicago meeting, a Committee on Correspondence and Statistics, consisting of thirty-five gentlemen residing in different States and Territories was named, with T. J. ALLAN, of Nebraska, as Chairman, the points to be investigated and reported upon being as follows:

1. Estimates of the area of woodland in square miles or acres, and average age of the trees.
2. Estimates of their productiveness per acre, in cubic feet of lumber and cords of fuel.
3. Lists of native trees and woody plants, with local and botanical names and their special value in the arts.
4. Location of species relative to elevation above the sea, to soil, etc.
5. Natural grouping and consociation of species, etc.
6. Numbers, kinds and acres of artificial forests planted, and the areas protected from cattle, in order to encourage the natural reproduction of trees.

was stated, the objects of the Society were, mutual improve-

At this meeting the Association did not adopt a Constitution, and it adjourned to meet at the Centennial, at Philadelphia, in September, 1876. In the circular issued for that meeting, it ment in the art, and diffusion of information upon the subject of Forestry, and the fostering of all interest of forest-planting and conservation on this continent.

In pursuance of the call, a meeting was held at the Judges' Pavilion, upon the grounds of the Centennial Exhibition at Philadelphia, September 15, 1876.

President JOHN A. WARDER, of Ohio, called the meeting to order, and briefly stated the object of the occasion to be, to complete the organization, and to devise means for promoting its objects. For want of time a portion only of his address was read.

A communication was received from the American Forestry Council,\* proposing that measures be taken for uniting the two

\* It may be proper here to state briefly what is referred to. Soon after the *American Association for the Advancement of Science*, at its session at Portland, Maine, in 1873, had taken action in the appointment of a committee to memorialize Congress and the State Governments upon the importance of measures for the protection and renewal of our forests, and, (as the writer was informed by the chief mover in the proceedings in this note mentioned,) as a direct sequence of the discussions at Portland, the subject was introduced at the meetings of the Farmers' Club of the American Institute, in New York City. Their reports show that papers were read upon various occasions during the fall and winter following. (*Thirty-Fourth Report of American Institute, N. Y. Assem. Doc. No. 153, 1874, pp. 147, 154, 157, 163, 167, 175, 180, 195, 199, 210.*)

On the 14th of October, a committee consisting of Geo. May Powell, of New York; Col. A. D. Robertson, of Minnesota; and S. Edwards Todd, of New Jersey, was appointed, and a week afterwards Prof. Henry E. Colton, of Georgia, was added, for the promotion of this object. Early in the winter of 1873-4, a memorial was adopted for presenting to Congress, with the draft of a Bill, (*N. Y. Assem., Doc., 1874, No. 153, pp. 180, 195, 199*) which, so far as we can learn, were not then presented. This committee, or persons connected with it, assumed the name mentioned in the text with the design of organizing an independent society upon a very expensive plan. In the subsequent proceedings none of the names mentioned appear, excepting the first, nor have we knowledge of further proceedings until the summer of 1876. In August of that year, the following card of invitation was issued:

organizations, when, upon motion, the subject was referred to a committee consisting of A. G. HUMPHREYS, of Illinois; J. J. HARRISON, of Ohio; and JOHN SAUL, of Washington, D. C.

A committee on organization was appointed to prepare and report a Constitution and By-Laws. A call for reports from States was made, but none of the Vice-Presidents reported.

A paper was then read by Dr. FRANKLIN B. HOUGH, of New York, upon "The Duty of Government in the Preservation of Forests,"\* Remarks were made upon this paper by Mr. THOMAS MEEHAN, of Pennsylvania, in which he expressed the view that we should not depend upon Government, but upon private enterprise in extending tree-culture. A short discussion was had upon the species most desirable for cultivation. Mr. G. HUSMANN, of Missouri, called attention to the Osage Orange, as perhaps the most desirable. He also regarded the Western Catalpa, Box-Elder, Red Cedar, Scotch and Austrian Pines as very desirable.

Mr. BURNET LANDRETH, of Pennsylvania, gave by request of the President, some account of the Osage Orange tree planted by his father many years ago.

Mr. J. E. SNODGRASS, of Virginia, remarked that he had

"You are invited to attend the National Forestry Convention, under the auspices of the American Forestry Council, at Sea Grove, Cape May Point, N. J., September 7th and 8th, 1876. As concerning climatic influences for the benefit of the life and health of the people, forests are of such importance, that irrespective of the vast material and more tangible interests involved, we cannot afford longer to delay thorough, general, and systematic investigation of the subject."

This card bore the names of several well known and worthy citizens, but the principal mover was Mr. Powell. Reduced railway and hotel rates were secured, and from the announcements in the daily papers it might be expected that an immense crowd would be in attendance. The writer of this note having a special invitation, attended, and was one of a party of *three persons* who were all that to his knowledge went for the purpose of attending the meeting. By inviting in the guests, a small gathering, (of perhaps twenty persons,) was had in the parlors of one of the hotels the first evening, and sundry papers were read and discussed. The draft of a Constitution had been prepared, but was not presented.—H.

\* Printed in the *Lowville Times*, New York, of October 15, 1876.

observed the Ailanthus, both in Virginia and at Philadelphia, and regarded it among the most desirable of trees on account of its rapid growth.

Prof. H. H. McAFEE, of Iowa, read extracts from a paper giving an account of Forestry in his State.\*

The Committee upon Consolidation reported, recommending the Executive Committee of this Association to meet with the Council at its next meeting on the 21st, and, if possible, effect a union. This report was adopted.†

A paper was received from J. J. HARRISON, of Ohio, upon "The Forest Trees of Northern Ohio," which, from want of time, was not read. A report was received from W. C. FLAGG, Vice-President for Illinois, a part of which was read.

Mr. BURNET LANDRETH gave, by request, an account of certain experiments in forest planting in Virginia, which he had caused to be printed.‡ He began planting in 1871, and designed to cover 7,000 acres. He is clearing off the native growths and planting as the ground is cleared. He has 320,000 Black Locust, 100,000 Black Walnut, 25,000 Cotton wood, 30,000 Persimmon, and 30,000 Larch trees, and intended to experiment upon the cultivation of the Sumac for a tanning material.

The Committee on Organization reported a form of Constitution and By-Laws, which were read and adopted, as follows:

### CONSTITUTION.

ARTICLE I. This Association shall be known as the AMERICAN FORESTRY ASSOCIATION.

ART. 2. Its objects shall be the protection of the existing forests of the country from unnecessary waste, and the promotion of the propagation and planting of useful trees.

\*Printed in the *Patron's Helper*, Des Moines, Iowa, December 6, 1876, under the title of "Forest-Tree Culture."

† We are not aware that the Council had a meeting on the day mentioned, or afterwards.

‡ "Address delivered before the American Forestry Association by BURNET LANDRETH, Chief of the Bureau of Agriculture, Centennial Commission, September 15, 1876;" 800, p. 10.

ART. 3. Its members shall consist of all persons paying an annual fee of one dollar into the treasury.

ART. 4. Its officers shall consist of a President, a Vice-President from each State, Territory, and Province of the country; a Secretary, and a Treasurer; and the President, Secretary, and Treasurer shall constitute an Executive Committee.

ART. 5. Its meetings shall be held biennially, and at such other times as the Executive Committee may deem necessary.

ART. 6. This Constitution may be amended at any regular meeting by a majority vote.

### BY-LAWS.

It shall be the duty of the President to preside at all meetings, to deliver an address at the regular meetings on the subject of the promotion of Forestry, and to call meetings of the Executive Committee when he may deem it necessary.

It shall be the duty of the Vice-Presidents to gather statistics in regard to Forestry in their several States, Territories, and Provinces, report the same at the regular meetings of the organization, and in general to promote in their several localities the objects of the Association.

It shall be the duty of the Secretary to conduct the correspondence, keep the records, and prepare the proceedings for publication.

The Treasurer shall receive and disburse the funds of the Association, on the written order of the President and Secretary, and he shall give such bond as the Association may require.

These By-Laws may be amended at any regular meeting by a majority vote.

The Committee on Organization also reported the nomination of officers for the coming two years as follows:

*For President:* Dr. JOHN A. WARDER, of Ohio.

*For Secretary:* Prof. HENRY H. McAFEE, of Iowa.

*For Treasurer:* Dr. FRANKLIN B. HOUGH, of New York.

These officers being declared duly elected, and there being no further business before the Association, it adjourned.\*

---

\*The Secretary of the Association emigrated to Nevada in the winter of 1877-8, and died there in March, 1878. The writer is unable, for this reason,

In January, 1880, a meeting of the Association was held at Washington, D. C., upon the call of the President, and a memorial was adopted recommending to Congress the appointment of a Commission for the purpose of obtaining information upon the subject of Forestry in Europe. This meeting was adjourned to the call of its President, which was next issued March 10, 1882, inviting its members to meet at Cincinnati, Ohio, April 25-29, 1882. Many of those who had participated in the former proceedings did so, and assisted in the organization of the AMERICAN FORESTRY CONGRESS.

On the 18th of May, 1882, another call was issued by President WARDER to members and all others interested in the objects of the Society, to meet at Rochester, N. Y., on Tuesday, June 29th, the day preceding the annual meeting of the American Nurserymen's Association, for the discussion of forestal topics, and for reorganization by the election of officers and other business. A meeting was accordingly held, at which was adopted the following

### CONSTITUTION.

ARTICLE 1. This Society shall be known as the AMERICAN FORESTRY ASSOCIATION, and shall seek to promote the interests of Forestry and to disseminate information connected therewith.

ART. 2. The officers shall be a President, a Vice-President, a Secretary, a Corresponding Secretary, and a Treasurer, who shall constitute an *Executive Committee*, with power to act on behalf of the Association. There may also be one Vice-President elected for each State, Territory, and Province in North America. The term of office shall be for one year, or until their successors are appointed.

ART. 3. Meetings shall be held annually, or at such times and places as the Executive Committee may direct, for the presentation of papers for discussion, and for practical measures relating to Forestry.

---

to consult any records he may have kept. The above is made up from the notes of the writer, made at the time, and is believed to be substantially full and correct.—H.



ART. 4. Any person recommended by a member of the Executive Committee may be elected to membership on the payment of two dollars. The annual dues shall be one dollar.

ART. 5. The Executive Committee shall have full authority to act for the Society in any emergency.

ART. 6. This Constitution may be altered at any regular meeting by a two-thirds vote of the members present.

By-Laws to be framed as needed.

The meeting elected the following officers:

*President:* GEORGE B. LORING, of Massachusetts.

*Secretary:* JOHN JENKINS, of Winona, Ohio.

*Corresponding Secretary:* ROBERT B. WARDER, Cincinnati, O.

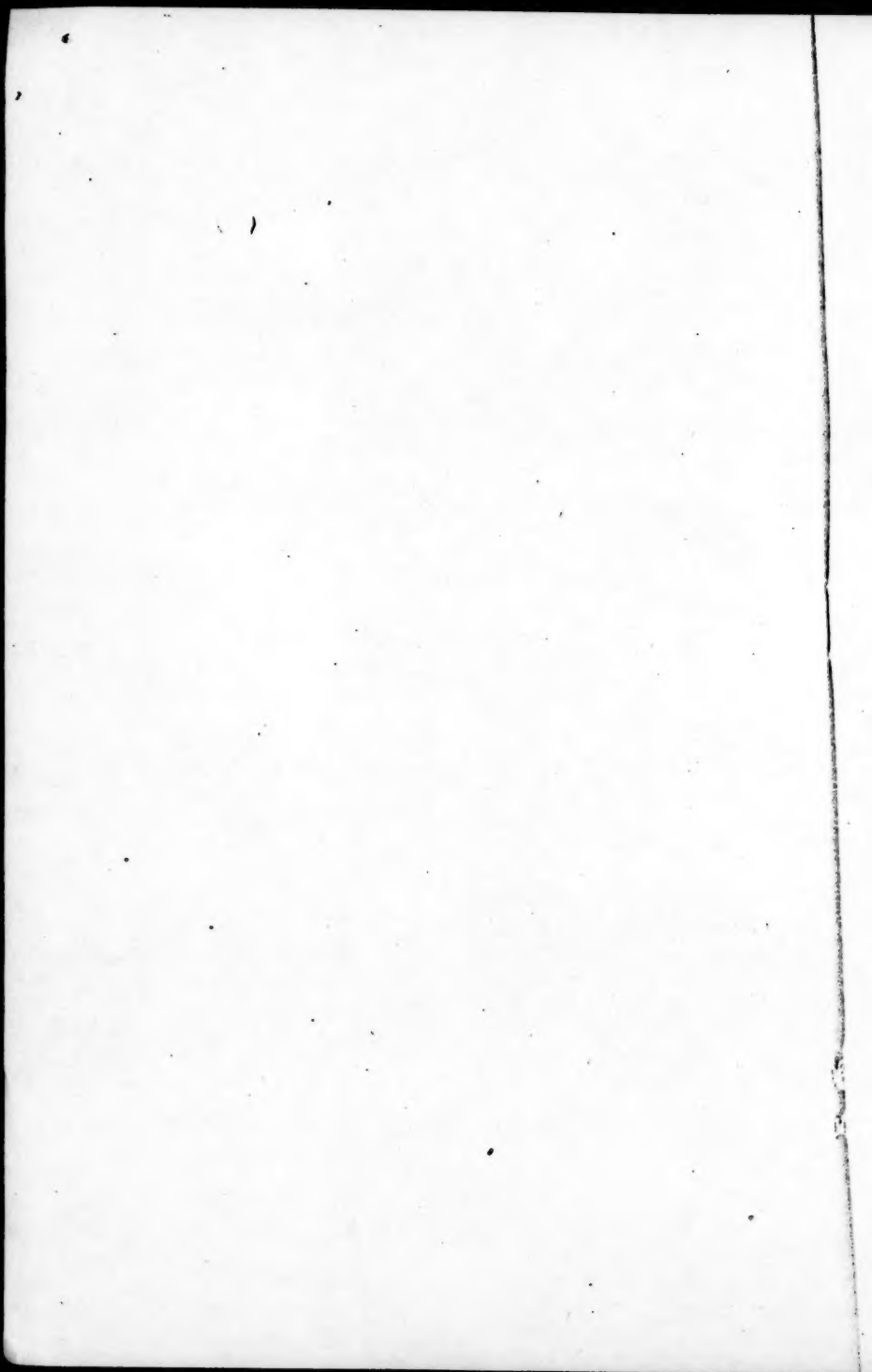
*Treasurer:* D. W. BEADLE, St. Catharine's, Ontario.

*First Vice-President:* JOHN A. WARDER, of Ohio.

And Vice-Presidents for several States and Provinces. They thereupon appointed a committee, consisting of NORMAN T. COLEMAN, of Missouri; E. MOODY, of New York City; and D. W. BEADLE, of Ontario, to confer with the American Forestry Congress with a view of uniting the two organizations.

[The subsequent proceedings at Montreal, resulting in a union as above contemplated, will be found on page 21 of this publication.]

On the 14th of September, 1882, Dr. WARDER, late President of the *American Forestry Association*, by circular informed the members of that body of the recent action and union, requesting them to accept the situation, and to remit their annual dues of the current year to Dr. CHARLES MOHR, of Mobile, Alabama, who had been appointed Treasurer of the *American Forestry Congress*.



# MEMBERS

## OF THE

# AMERICAN FORESTRY CONGRESS.

[Those marked (a.) belong to the AMERICAN FORESTRY ASSOCIATION.]

- |   |  |
|---|--|
| Abbe, Cleveland, Washington, D. C.        | Chabert, M. L'Abbe, Montreal.                                    |
| Adams, C. K., Montreal.                   | Chaffers, Hon. W. H., St. Cezaire, Que.                          |
| Addie, James, Huntingville, Quebec.       | Chambers, A. H., Montreal.                                       |
| Allan, James T., (a) Omaha, Neb.          | Charlton, E. F., Quebec.   |
| Anderson, Charles, Kuttawa, Ky.           | Church, Hon. L. Ruggles, Montreal.                               |
| Andres, S. J., Montreal.                  | Clay, Hon. Cassius M. Whitehall, Ky.                             |
| Andrews, C. C., St. Paul, Minn.           | Cochran, J. W., (a) Blue Island, Ill.                            |
| Augustine, H., (a) Normal, Ill.           | Colman, Hon. N. J., (a.) St. Louis, Mo.                          |
|   | Costigan, Hon. John, Ottawa, Ont.                                |
| Bambach, G., Ripley, O.                   | Crandall, A. R., Lexington, Ky.                                  |
| Barnard, E. A.                            | Crebassa, J. B., Forel, Que.                                     |
| Barnard, S., Table Rock.                  | Cullinan, John G., Cullman, Ala.                                 |
| Barry, Patrick, (a.) Rochester, N. Y.     |  |
| Baskerville, P. (M. P.) Ottawa, Ont.      | Dana, George, Belpre, O.   |
| ✓ Beadle, D. W., (a) St. Catharines, Ont. | Davis, Franklin, (a.) Baltimore, Md.                             |
| Beal, Prof. W. J., Lansing, Mich.         | Dean, Harmon, Sidney, O.   |
| Beall, Thomas, Lindsay, Ont.              | DeBeck, William L., Cincinnati, O.                               |
| Bear, S. J., Dayton, O.                   | Dempsy, P. C., Trenton, Ont.                                     |
| Beaudry, J. Alphonse D., Montreal.        | Denton, John W., London, Ont.                                    |
| Beaudry, J. L., (Mayor) Montreal.         | FeZouche, George C., Montreal.                                   |
| Beaudry, P. J. U., Beauharnois, Que.      | Dougall, James, Windsor, Ont.                                    |
| Bell, D. Pembroke, Ont.                   | Douglas, Robert, (a.) Waukegan, Ill.                             |
| Bennett, Jno. P., Woodlyn, Pick'y Co., O. | Douglas, Thomas, (a.) Waukegan, Ill.                             |
| Bissell, W. S., (a.) Pittsburgh, Pa.      | Drolet, Gustave A., Montreal.                                    |
| Blaklock, F. W., Montreal.                | Drummond, A. T., Montreal.                                       |
| Bock, S., Miamisburg, O.                  | Dunlop, H. L., (a.) Champaign, Ill.                              |
| Booth, J. R., Ottawa, Ont.                |  |
| Brackett, G. B., Denmark, Iowa.           | Earle, Frank, (a.) Cobden, Ill.                                  |
| Brackett, G. C., (a.) Lawrence, Kan.      | Earle, Parker, (a.) Cobden, Ill.                                 |
| Bronson, E. H., Ottawa, Ont.              | Eaton, Hon. John, (U. S. Com'r. of Education,) Washington, D. C. |
| Bryant, Arthur Sr., (a) Princeton, Ill.   | Edwards, Samuel, (a.) Mendota, Ill.                              |
| Brown, Prof. William, Guelph, Ont.        | Edwards, William C., Rockland, Ont.                              |
| Bryson, Hon. George, Ft. Coulonge, Que.   | Egleston, N. H., Williamstown, Mass.                             |
| Buchanan, W. J., Montreal.                | Ellsworth, Lewis, (a.) Naperville, Ill.                          |
| Budd, Prof. Joseph L., (a) Ames, Iowa.    | Ellwanger, George, (a.) Rochester, N.Y.                          |
| Buell, A. A., Montreal.                   | Emery, S. M., (a.) Lake City, Minn.                              |
| Burckhardt, L., Cincinnati, O.            |  |
| Bureau, Hon. J. O., St. Remi, Que.        | Fair, John, Montreal.  |
| Burnett, Robert, Pictou, N. S.            | Fay, Joseph S., Woods' Holl, Mass.                               |
| Butler, Amos W., Brookville, Ind.         | Fell, Jesse, (a.) Normal, Ill.                                   |
|   | Fernow, Bernhard E., Oxford, N. J.                               |
| Calkins, F. A., Burlington, Iowa.         | Foley, M. S., Montreal.  |
| Campbell, George W., (a.) Delaware, O.    |  |

- Forbes, Prof. S. A., (a.) Normal, Ill.  
 Foster, Suel, (a.) Muscatine, Iowa.  
 Francis, L. C., (a.) Springfield, Ill.  
 Freeman, H. C., (a.) Alto Pass, Ill.  
 Furnas, Allen, (a.) Danville, Ind.  
 Furnas, Hon. Robt. W., (a.) Brownville, Nebraska.  
 Galusha, O. B., (a.) Morris, Ill.  
 Gamble, James A., Cincinnati, O.  
 Garand, Remi J., Montreal.  
 Gaston, A. H., (a.) Lacon, Ill.  
 Gault, M. H., (M. P.) Montreal.  
 Geiger, H. R., Springfield, Illinois.  
 Gianelli, A. M. F., (Italian Con.) Mont.  
 Gilbert, A. M., Ross, Ohio.  
 Gordon, James, Ottawa, Ontario.  
 Graves, H. C., (a.) Sandwich, Illinois.  
 Grimes, D. S., (a.) Denver, Colorado.  
 Haines, J. S., (a.) Germantown, Penn.  
 Hall, T. D., Montreal.  
 Hammon, A. C., (a.) Warsaw, Illinois.  
 Hammon, George W., Boston, Mass.  
 Harvey, Prof. F. L., Fayetteville, Ark.  
 Hatheway, Elmond, (a.) Otsdawa, N.Y.  
 Hatheway, Mrs. P. V., (a.) Otsdawa, N.Y.  
 Haycock, Edward, Ottawa, Ontario.  
 Heaven, William, (a.) Los Angeles, Cal.  
 Heneker, R. W., Sherbrooke, Ontario.  
 Hicks, John S., (a.) Roslyn, N. Y.  
 Hill, David, (a.) Dundee, Illinois.  
 Hincks, Sir Francis, Montreal.  
 Hingston, Dr. William H., Montreal.  
 Hodges, Leonard B., (a.) St. Paul, Minn.  
 Hoopes, Josiah, (a.) West Chester, Penn.  
 Hough, Franklin B., (a.) Lowville, N.Y.  
 Howard, Dr. Henry, Montreal.  
 Hughes, Charles, Montreal.  
 Humphreys, A. G., (a.) Galesburg, Ill.  
 Husman, George, (a.) Napa, Cal.  
 Jenkins, J., (a.) Winona, Ohio.  
 Joly, Hon. H. G., Point Platon, Que.  
 Keefer, Thomas C., Ottawa, Ontario.  
 Kelsey, S. T., (a.) Highlands, N. C.  
 Kinney, D. F., (a.) Rock Island, Ill.  
 Knapp, J. G., (a.) Limona, Florida.  
 Kramer, William, Dayton, Ohio.  
 Kuehnert, Robert, Cincinnati, Ohio.  
 Latour, L. A. H., (M. A.) Montreal.  
 Lazenby, Prof. W. R., Columbus, Ohio.  
 Leclerc, Georges, (Supt. Council Ag.,) Montreal.  
 Leuc, Adolph, Cincinnati, Ohio.  
 Lindley, J. V., (a.) Greensboro, N. C.  
 Little, Ch. B., Montreal.  
 Little, James, Montreal.  
 Little, L. G., Montreal.  
 Little, William, Montreal.  
 Logue, Charles, Maniwaki, Quebec.  
 Loring, Hon. George B., Salem, Mass.  
 Lowery, Samuel R., Huntsville, Ala.  
 Lynch, Hon. W. W., (Com'r. Crown Lands.) Quebec.  
 McConnell, Dr. J. B., Montreal.  
 McConville, P. W., Joliette, Quebec.  
 McKinstry, B. W., (a.) Grant Park, Ill.  
 McLaurin, John, East Frampton, Que.  
 McRae, George, Montreal.  
 McWhorter, Tyler, (a.) Aledo, Ohio.  
 Mailhot, Hon. H. G., Three Rivers, Ont.  
 Mailhot, Rev. N. E., Sutton, Quebec.  
 Mann, W. H., (a.) Gilman, Ill.  
 Manning, Jacob W., (a.) Reading, Mass.  
 Marler, George L., Montreal.  
 Martin, J. R., Cayuga, Ontario.  
 Martin, Richard, Hamilton, Ontario.  
 Massue, Hon. L. H., Varennes, Quebec.  
 Masters, J., (a.) Nebraska City, Neb.  
 Meehan, Thomas, (a.) Germantown, Pa.  
 Meyer, C. H., Fond-du-Lac, Wis.  
 Meyneke, Oscar, Brookville, Ind.  
 Mills, James, (Pres. Ag. College,) Guelph, Ontario.  
 Mills, W. B., Beaufort, N. B.  
 Minier, G. W., (a.) Minier, Illinois.  
 Minkler, S. G., (a.) Oswego, Illinois.  
 Mohr, Charles, Mobile, Alabama.  
 Moody, E. S., (a.) Lockport, Illinois.  
 Mooney, J. H., Montreal.  
 Morton, J. Sterling, (a.) Nebraska City, Nebraska.  
 Morse, George H., Burlington, Vt.  
 Mousseau, Hon. J. A., (Premier.) Mont.  
 Munderloh, William C., Montreal.  
 Manson, T. V., (a.) Denison, Texas.  
 Murdock, Albert L., (a.) Boston, Mass.  
 Neally, Green C., (a.) Burlington, Iowa.  
 Nelson, W. T., (a.) Wilmington, Ill.  
 Normand, J. B., Three Rivers, Quebec.  
 Normand, T. E., Three Rivers, Quebec.  
 Ogilvie, Hon. A. W., Montreal.  
 Orton, Edward, Columbus, Ohio.  
 Ouimet, Hon. Gideon, Quebec, Ont.  
 Papineau, J. G., Montreal.  
 Pearson, J. M., (a.) Godfrey, Ill.  
 Peffer, P. G., Pewaukee, Wis.

- Pennington, Dr. L. S., (a) Sterling, Ill. Taché, E. E., (*Assist. Com. Crown Lands*)  
 Pentland, Francis, (a) Lockland, Ohio. Quebec.  
 Periam, Jonathan, (a) Chicago, Ill. Taft, J., Cincinnati, Ohio.  
 Perley, W. G., Ottawa, Ontario. Tallant, Dr. J. F., (a) Burlington, Iowa.  
 Petersen, P. S., Chicago, Illinois. Teall, J. L., Pervins Mills, Ohio.  
 Piatt, J. Sauters, (a) Mock-a-check, O. Teas, E. Y., (a) Dunreith, Indiana.  
 Plumb, J. C., (a) Milton, Wisconsin. Teas, J. C., (a) Carthage, Mo.  
 Pope, Hon. J. H., (*Minister of Agriculture*) Ottawa, Ontario. Thayne, Stewart, Ottawa, Ontario.  
 Proctor, John R., Frankford, Ky. Thistle, W. R., Ottawa, Ontario.  
 Quinn, Francis A., Montreal. Thomas, F., Walferston, Montreal.  
 Ray, Jackson, Montreal. Thompson, D. D., Cincinnati, Ohio.  
 Raymond, H. C., (a) Council Bluffs, Iowa. Thompson, M. H., (a) Lake Preston, Dakota.  
 Riley, Prof. C. V., (*Dept. Ag.*) Washington, D. C. Thorne, W. R., Ottawa, Ontario.  
 Ritchie, William, Three Rivers, Quebec. Thorne, W., Springfield, Ohio.  
 Rob. William, (*City Auditor*) Montreal. Torrence, C. E., Montreal.  
 Roots, B. G., (a) Pamaroa, Illinois. Townshend, Prof. N. S., (a) Columbus, O.  
 Ross, W. Gerand, St. Nicholas, Quebec. Tracy, W. W., Detroit, Michigan.  
 Ross, Hon. J. J., St. Anne de la Perade, Ulbricht, Geo. Alfred, Dresden, Saxony.  
 Russell, A. J., (*Crown Timber Agt.*) Ottawa, Ontario. Vasey, Dr. George, (*Botanist D. of Ag.*) Washington, D. C.  
 St. John, J. W., Hamilton, Ohio. Wallbank, W. McL., Montreal.  
 Saul, John, (a) Washington, D. C. Walker, J. A., Montreal.  
 Saunders, Prof. William, London, Ont. Ward, J. K., Montreal.  
 Scofield, D. C., (a) Elgin, Illinois. Warder, Dr. John A., (a) North Bend, Ohio.  
 Scofield, L. K., (a) Freeport, Illinois. Warder, Prof. Robert B., North Bend, Ohio.  
 Scott, D. W., (a) Galena, Illinois. Watrons, C. L., (a) Des Moines, Iowa.  
 Scott, Dr. W. S., Southampton, Ont. Watson, William, (a) Brenham Tex.  
 Seeley, Prof. H. M., Middlebury, Vt. Weltz, Leo., (a) Wilmington, Ohio.  
 Senecal, L. A., Montreal. Whiting, C. E., (a) Whiting, Iowa.  
 Shanley, Walter, Montreal. Whitney, A. R., (a) Franklin Grove, Ill.  
 Shepard, Otis, Boston, Mass. Whitney, N. S., Montreal.  
 Simpkinson, John, Cincinnati, Ohio. Williams, H. H., (a) Galesburgh, Ill.  
 Simpson, W., Montreal. Wilson, Hon. Horace, Columbus Ohio.  
 Smith, Charles, Marion, Ohio. Wilson, H. W., Boston, Mass.  
 Smyth, Ex-Gov. Frederick, Manchester, New Hampshire. Woodbury, C. H., New York.  
 Spalding, Prof. V. M., Ann Arbor, Mich. Wright, Elizur, Boston, Mass.  
 Springer, Alfred, Cincinnati, Ohio. Wright, George H., (a) Sioux City, Iowa.  
 Spring-Rice, Hon. E. H., Montreal. Wright, T. W., Montreal.  
 Starnes, Hon. H., Montreal. Wurtele, Hon. T. S. C., (*Prov. Treas.*) Montreal.  
 Starr, J. W., Steele City, Neb. Zimmerman, C. D., (a) Buffalo, N. Y.  
 Steele, Robert W., Dayton, Ohio.  
 Stephens, W. Hudson, Lowville, N. Y.  
 Stewart, Dr. J. T., (a) Peoria, Ill.  
 Stickney, J. S., (a) Wauwatosa, Wis.  
 Stout, Henry Oursler, Adams Co., O.  
 Studer, Jacob H., Columbus, Ohio.

45

41

92  
Council

Burson, D. C.,—

Clarke, Robert,—

Comegys, Dr. C.

Coursler, Henry  
Ohio.\*

Gano, John A. —

McNamara, Thos.  
Ohio.

\* Instead of t

*Names omitted in the preceding list.*

D. C.,—Philadelphia, Pa.	Miller, Jos. W.,—College Hill, Ohio.
Robert,—Glendale, Ohio.	Sohn, John Wm.,—Hamilton, Ohio.
Dr. C. G.,—Cincinnati, Ohio.	
Henry,—Stout's, Adams Co.,	Tice, Jerome, Elenor <del>and</del> Clermont, Co., O.
o.*	
John A.,—Cincinnati, Ohio.	Walden, Rev. John M.,—Cincinnati, O.
	Wright, Jos. F.,—Mt. Healthy, Ohio.
ara, Thos.,—Hartwell, Ham Co.,	
o.	

stead of the name given on page 43, 2d line from bottom, in first column.